

MULTIPLE METASTATIC ABSCESSSES OF THE HEART AND LUNGS IN PYEMIA.

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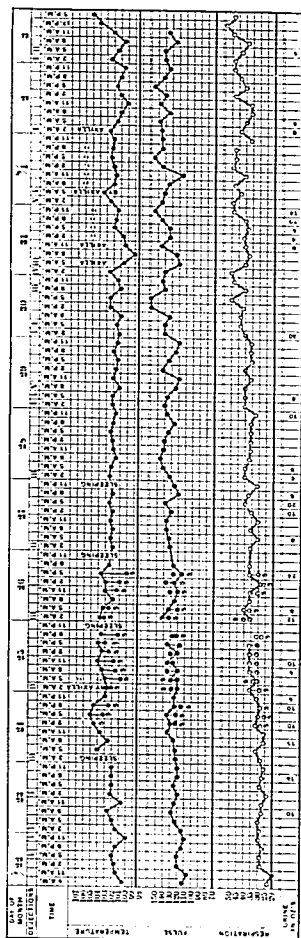
PHILADELPHIA.

THE very occasional occurrence of suppurative myocarditis or of circumscribed abscess formation in the cardiac muscle lends to either of these conditions sufficient interest to call for the report and description of each new case. Abscess of the heart is a condition that was known to the ancient physician. It is no more recognizable by clinical signs today than when it was studied on the Egyptian autopsy table. The symptoms and physical signs are those of toxemia, not of a definitely localized suppurative process, and not even of a definite cardiac clinical entity. Yet the possibility of such an occurrence and of such an involvement of the myocardium as was present in the instance described below should ever be borne in mind and have weight in determining both the diagnosis and prognosis in the given case of toxemia.

Beck and Stokes¹ have recently reported an instance of suppurative myocarditis as contrasted with the circumscribed abscess formation seen in cases similar to that here described.

The patient now reported was a trained nurse, aged twenty-four years, serving in the eye ward of the Philadelphia General Hospital. Her family history was entirely negative, both parents being alive and well and one sister a nervous invalid. The patient had never been robust, but was wiry, and always active and energetic. During childhood she had pneumonia; otherwise she had been free from severe illness. One year previous to the history here related she had suffered from a severe and extensive furunculosis, from which she had entirely recovered. Two weeks prior to the present illness, while on duty in the eye ward, a small pimple appeared on the right forehead above the eyebrow. Probably through fingering this pimple infection occurred, and on July 22, 1910, a severe cellulitis and carbuncular suppuration of the scalp followed within a few days. On July 24, 1910, she became quite ill, displayed a temperature of 101° F., and two days later 105° F., and complained of intense pain in the left side. She vomited rather than coughed considerable mucus, and had much nausea. On July 25 the pain seemed to distribute itself more generally throughout the chest, though the original agonizing pain persisted near the apex of the heart and the anterior axillary line. A culture from the scalp pus made by Dr. Randle C. Rosenberger yielded micrococci of suppuration. The right eye at this time became inflamed and discharged a thick pus from

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the conjunctival sac, which was examined for gonococci and other bacteria, with negative result.

When seen in consultation at the request of Dr. Frescoln, and later with Dr. William E. Hughes, the patient was decidedly toxic, though fully conscious, and in evident pain, which she indicated as most intense in the left side low down in the anterior axillary line. She related that three days previously she had a chill, and since then the pain in this location and sometimes throughout the chest had been constant and very severe. The right eye, the orbital tissues, and the eyelid on July 25 all appeared boggy, the temporal tissues were discolored and edematous, and the surrounding scalp suggestive of underlying infection.

The patient was of small frame, normal in contour. The skin was sallow, but not distinctly jaundiced. The whole of the right half of the scalp was involved in a cellulitis, which caused a dark bluish color of the tissues, through which numerous pustular openings discharged each about a drop of greenish-yellow pus. There were no other suppurative foci on the surface of the body. The cardiac rate was then 120 to 140, the respirations averaged 30 to 35, and there was much distress on breathing and coughing, mainly, as before, on the left side. There was also a small area in the left posterior chest near the angle of the scapula that, even to the lightest palpation, was exquisitely tender. Over the entire left lung a harsh friction was audible, heard loudest and evidently produced over the left scapular region. No rales were audible as yet over the left lung. Over the right lung the breath sounds were comparatively free, though over the right base posteriorly were heard a few tiny crackling rales.

On July 26 the patient experienced much distress from pain and labored breathing. On this day there also appeared a profuse urticarial eruption, whether as the result of small doses of quinine (1 grain three times daily) or of the toxemia did not appear clear at first, though on the withdrawal of the quinine the urticarial wheals gradually changed into hemorrhagic areas, some petechial others extensive in size. A few of the smaller petechiae presented a tiny pustule in the centre. The patient also began to expectorate bloody mucopus and gave signs of widespread consolidation behind and below the left scapula. Loud, metallic, crackling rales became audible over the left axilla, and soon extended over the entire anterior lower lobe. The right eye and the surrounding tissues were more and more involved in a virulent suppurative inflammation, and pus extruded from dozens of small openings over the entire cranial surface.

On August 1 the pain and dyspnea were extreme; the patient was jaundiced and deeply toxic; the tongue dry and parched, and the abdomen greatly distended. Air hunger was intense. At this time there occurred a syncopal attack that caused the patient to appear

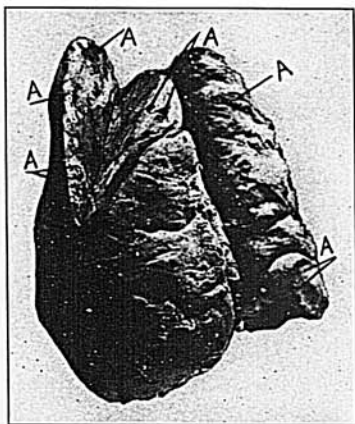


FIG. 2.—Lungs containing numerous abscesses (A).



FIG. 3.—Heart, showing metastatic abscesses (A) near apex



FIG. 1.—Heart, showing portion of large pus collection (A) in left ventricle wall.

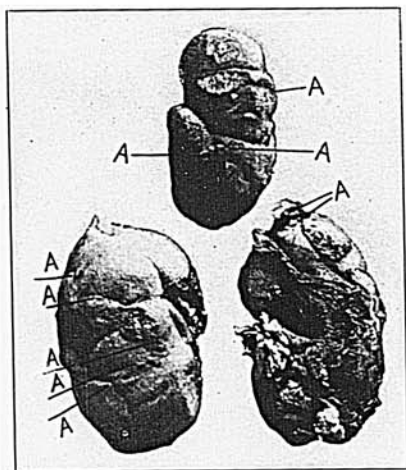


FIG. 5.—Kidneys, the seat of many small abscesses (A).

moribund. Free incisions had been made in the scalp early in the morning of this day by Dr. M. G. Warmuth, and a large quantity of thick greenish pus was evacuated through the incisions and through the myriad carbuncular openings. From the pus staphylococci only were obtained. An autogenous vaccine had been prepared from the micrococci obtained in the scalp pus earlier in the history of the case, and was used on this day, but without evident benefit. A pure culture of pneumococci was eventually obtained from the blood.

On August 3 the patient became even more deeply jaundiced, expectorated pure blood, and was evidently dying. Large metallic rales were heard over the entire left anterior chest (the patient was at this time too ill to examine needlessly). The next day she seemed for the moment stronger and more comfortable than at any time. The mind was again clear, the patient asked for food, said she was hungry, and took considerable interest in her surroundings. She again became toxic in appearance, however, and at 7 P.M. suddenly collapsed and died.

Autopsy Record. On August 5 section was made of the body, which had already been embalmed. The tissues were deeply bile-stained and of a deep saffron color, except the scalp, which was of a dark purple hue. Everywhere over the body were the petechial and ecchymotic areas noted during life. On opening the thorax the lungs were seen to be adherent at all points of contact with the pericardium. About one pint of seropurulent fluid was removed from each pleural cavity. Everywhere were also extensive adhesions binding the lungs to the thoracic wall. Both lungs were riddled with abscesses (see Fig. 2), the pus from which contained in every microscopic field a few pneumodiplococci. The heart was dilated, and the muscle, though hypertrophic, was flabby and weak. In the myocardial wall were multiple metastatic abscesses, several on the surface of the heart near the apex (see Fig. 3), and one large pus collection just below the anterior coronary opening in the left ventricular wall (see Fig. 4). Smears from the pus in the myocardial abscesses were examined, and in all were found great numbers of pneumodiplococci, as contrasted with the very few detected in the pus obtained from the pulmonary foci.

The kidneys also presented many small abscesses (see Fig. 5), both upon the surface and within the parenchyma. Two infarcts were found in each kidney. The spleen contained one small abscess beneath the capsule. The liver showed marked congestion and some fatty degeneration, but no localized pus foci. There was about one pint of clear serum in the abdominal cavity. The stomach, intestines, pancreas, and uterus and appendages all appeared normal.